

## PROTEIN DIGESTIBILITY AND RELEVANCE TO ALLERGENICITY

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## **PROTEIN DIGESTIBILITY AND RELEVANCE TO ALLERGENICITY**

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## **Abstract**

In January 2001 a Joint FAO/WHO Expert Consultation Committee on Allergenicity of Foods Derived from Biotechnology published a report that outlined in detail an approach for assessment of the allergenic potential of novel proteins. One component of this decision tree is a determination of whether the protein of interest is resistant to proteolytic digestion. Although these *in-vitro* methodologies have been useful, the correlation between resistance to proteolysis and allergenic activity is not absolute. More recent work, presented in this review, with various known and unknown food allergens and various other proteins, *i.e.* storage proteins, plant lectins, contractile proteins and enzymes compared digestion stability in both simulated gastric and intestinal fluids. Food allergens were not necessarily more resistant to digestion than nonallergenic proteins. There was not a clear relationship between digestibility measured *in-vitro* and protein allergenicity.